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D. RAY

Virginia Wildlife

*Dedicated to the Conservation of
Virginia's Wildlife and Related Natural Resources
and to the Betterment of
Outdoor Recreation in Virginia*

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COVER: The flier is a species of sunfish that is caught more often than it is recognized by many anglers who know all panfish of the sunfish clan as either "bream" or "crappie." The flier is often the dominant panfish species in dark, acid swamp waters of the coastal plain. There is more about this fish on page 4. Our artist: Duane Raver. Cary, North Carolina.

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Who Owns the Wildlife?

STATE wildlife management agencies, acting through their International Association of Game, Fish and Conservation Commissioners, may be fighting for their lives in their effort to clarify and reaffirm the state's traditional jurisdiction over wildlife resources.

Federal land agencies and state wildlife commissions have enjoyed generally satisfactory relationships in recent years, until there came forth a shattering opinion by a Solicitor in the Department of the Interior which holds that the federal government has exclusive authority to manage and regulate all fish and wildlife on federal lands. This view clashes head-on with traditional state sovereignty over fish and resident wildlife that has existed since colonial times and often been upheld by the courts.

A statement issued by the International Association refers to the history of state and federal relations involving resident wildlife species, and makes it clear that the states are not seeking greater powers than they have always exercised:

"The International Association of Game, Fish, and Conservation Commissioners has for some time been greatly concerned over the continuing trend toward federal intrusion into the historic and traditional areas of responsibility and jurisdiction of the states in the management of fish and resident wildlife. The gradual usurpation of authority has been greatly accelerated by the opinion of the Solicitor of the Department of the Interior, dated December 1, 1964, which stated, in effect, that the federal government has authority superior to that of the states in managing and regulating all fish and wildlife on federal lands.

"If the federal government's claim of authority over fish and resident wildlife prevails, then private landowners could conceivably claim a similar right, and the time-honored principle of state ownership, regulation and management of fish and resident wildlife would be destroyed. It is the firm and unequivocal conviction of this Association that the ownership of land does not include ownership of fish and wildlife as claimed by the Solicitor's opinion. Such a doctrine would have an extremely adverse and chaotic effect on the management of fish and wildlife resources in all parts of the nation. . . .

"In attempting to resolve this dispute, it should be emphasized and made abundantly clear that the International Association does not desire to change the present status of certain laws and concepts which have to do with the following:

1. Any international treaty involving the regulation of migratory birds.
2. The Rare and Endangered Species Act.
3. The Bald Eagle Act.
4. Rights of Indians and natives of Alaska to hunt and fish as established by treaties or Acts of the Congress.
5. The management of lands or control over wildlife species which have been ceded by any state to the U. S.
6. The federal responsibility for conserving and developing fish and wildlife habitat on federal lands.

"The International Association fully subscribes to the traditional right of the landowner to manage his lands. We agree that the federal government has the same rights that any other landowner has under the laws of the respective states."

Spurred by deliberate provocation by the National Park Service in spurning offered state permits for collection of deer in Carlsbad Caverns National Park (the deer were subsequently killed illegally by Park employees and left to rot) the International Association developed corrective legislation which was introduced but not voted upon in the last Congress. The 91st Congress will have its chance to consider similar legislation. Perhaps Congressional action to reaffirm to the states a right which has never been conferred upon the federal government should not be necessary. But if the principle of state jurisdiction over fish and resident wildlife topples, the whole structure of fish and wildlife management that has been built in the fifty states will topple with it—J.F.Mc.

IT was the first day of trout season and I was all alone at my favorite hole atop the same rock I have fished for years. Not a living thing was in sight except what seemed a whole truckload of fish.

My watch showed 8:00 o'clock. I tossed a small pebble into the stream and those trout fought over that pebble as if they had not eaten for a week, and I had four more hours before the season officially opened.

I knew when I left home I would have a long wait, and it is still cold in early April, so there I sat with heavy pants, wool shirt, old hunting coat, hip boots, plus fish creel on one side and landing net on the other. My hat was the one I wore when I caught that 21-inch monster four years before, although I had added a few more lures to the brim. On my belt I had a bait box of worms and that new salmon egg dispenser I got the week before. You have to be prepared, for you never know what they will be biting.

At 11:00 o'clock the traffic along the creek was heavy and everyone seemed to be going to the upper end of the creek, until a car stopped and a man walked over.

"See any?" he asked. I answered, "A few," but as he looked into the water I knew I was going to have company fishing the hole.

He went to his car and returned with fishing tackle and a small radio. He whipped out the antenna and began to talk into the radio and in a few minutes two cars and a pick-up truck arrived with six men and three boys. As they came down the bank I heard one say, "You came in loud and clear."

The next forty minutes I spent watching the boys throwing everything within reach into the water, and one falling in himself. Someone asked the time and three men had 11:45 and one 11:55 and all agreed the latter was correct.

On my first cast my line tangled and while I straightened it out everyone proceeded to catch a fish. As I began again someone waded directly through the hole, scaring the rest of the fish so they would no longer bite.

Does it sound a little fantastic? If you think so, just ask someone who comes home empty-handed the first day of trout season this year.

James Lee Ogden
Virginia Beach



I read [C. H. Shaffer's] article on wild turkeys and turkey beards in the November issue of *Virginia Wildlife* and enjoyed it a lot as I do all articles on turkeys. I am enclosing a picture of the bearded hen turkey that I killed last fall and mounted myself. I thought you might be interested in the beard on this one as it is considerably thicker than the one illustrated in the article (page 23).

Garland Clark
Keysville

The Flier

Virginia's Little Known Sunfish

By LTC JACK RANDOLPH
Springfield

"FISHING the marl" is one of the more productive methods of finding and catching bream and bass once the waters of Chickahominy Lake warm to the summer's sun. "Marl" is a local name for duckweed, a tiny floating plant, that floats in rafts of millions on the surface of many Virginia ponds.

Pushed over the surface of the lake by the wind, the duckweed often provides a bank-to-bank carpet of green that provides cooling shade to fish seeking cover from hot summer sun. A plug or fly cast upon this very thin carpet can be easily seen by the fish below as the tiny plants part

After allowing his fly to rest a moment, Tony started to "walk" the spider back, the lure pushing a tiny path in the weeds. I was intrigued watching the black water open up behind the fly, when suddenly it disappeared with a loud pop.

The deep bend in Tony's rod told the story as the bream offered his slab sides to the angler. The line cut tiny circles in the duckweed as the sunfish was worked slowly towards the boat.

When the fish was within reach Tony eased it into the boat by lifting it by the leader. With a deft motion he grabbed the fish and removed the fly with a twist before



Except for its head and tail the flier's body is nearly round in shape, which accounts for one of its common names, "round sunfish." It thrives better than most sunfish in the highly acid waters characteristic of our eastern swamps.

behind the bait which leaves a tell-tale trail. Occasionally a bass will explode through the duckweed to take a lure, but more often it's bream that takes the fly with a distinctive "pop."

Tony Sylvester of Hopewell and I were fishing the marl beds on the Chickahominy when I first met the beautiful, but little known, sunfish called the flier. We were casting rubber-legged spiders in Fox's Creek, hoping for a few bluegills after spending a fruitless morning fishing for bass. Tony was showing me his technique of casting the flies over the ten-foot-wide band of duckweed that bordered the bank so that the fly landed close to shore.

tossing the bream to me for the stringer.

I caught the fish without giving it a second glance but as I began to string it I noticed that this bream was quite different from any I had ever seen before. Instead of the characteristic blue-black hue of a Chickahominy bluegill this fish had a dark brassy color. Absent was the blue tab behind the gills. Instead of the bright, yet gentle, colors of the bluegill on the flanks, this sunfish was definitely spotted, the spots being arranged in rows. The fish seemed to be of more a round shape than the bluegill.

"Hey, Tony," I queried, "what kind of a fish is this?"

"That's a flier," he replied.

I had never heard of a flier before, and I was certain that this must be some sort of a local name given to some sunfish I'd recognize by some other name. I didn't press the point further at the time. At the moment we seemed to be in the center of the flier population and I decided to just enjoy catching them and look up the proper name later.

It seemed that we couldn't cast a lure onto that duckweed bed without having two or more fliers race for it. The fish took the fly every bit as well as bluegills and they fought with nearly the same determination. Later I was to discover that they performed equally well in the frying pan.

A few days later I looked up the flier in my tattered copy of *North American Game Fishes* by Francesca La Monte, published by Doubleday & Company. I was surprised to discover that Tony Sylvester was correct; the fish was indeed a flier, also known as the Round Sunfish. Its rather impressive Latin name is *Centrarchus macropterus*.

The flier is a natural Virginian. Since there has been no known effort to introduce the fish, any waters that have them come by them honestly. In Virginia fliers are mostly found on the coastal plain and the southside Piedmont regions. They prefer acid swamp water such as that found in Dismal Swamp. Although I've never caught them there, I understand that fliers are the most numerous sunfish to be found in Lake Drummond.

The second time I encountered this curious bream I was fishing the Izaak Walton Pond, a tiny body of water located near Route 460 at Disputanta. This pond was partially choked with a tight growth of water lilies. Patches of open water were scarce.

I was fishing one such patch of open water when I noticed another angler pushing through the lilies. Suddenly he stopped paddling his boat and, wielding his paddle as a club, he began to viciously beat the water. I thought he was killing a snake. You can understand my utter amazement when he finally quit flailing the water and picked up his fishing rod and began to fish in that exact spot. I nearly fell through the bottom of my boat after he caught his first fish and then, in moments, another.

I watched him take another dozen fish before he moved on and repeated the performance again. Finally I could stand it no longer and I shouted across the water, asking, "What are you catching?"

"Crappie," was the one word reply.

"What bait are you using?"

"Worms," another one word answer.

Worms I had and I also had a paddle so I tried to copy his performance. My results weren't nearly as spectacular but I did catch two fish for my efforts. I suspect that I wasn't holding my paddle right.

Both of the fish I caught were fliers and both were exceptionally large; larger than those taken at the Chickahominy.

I made it a point to head for shore when the other fellow decided to quit. I wasn't a bit surprised to discover that his "crappie" were also fliers.

Although fliers are native to Virginia they are also found southward to Florida and along the Mississippi from Illinois to Louisiana. They can be found on the beds in late June and early July when they are fair game for the fly rod addict. Fliers don't grow as large as bluegills, but they are full of the same spunk that makes most bream so popular.

I wish I could wind up this article by telling you where the flier got his unlikely name. Flier is a silly name for a fish, but if I were a fish, I'd rather be called a flier than a crappie.

Exotic Cargo

By OZZIE WORLEY
Roanoke

DIXIE Shumate, Sr., met a plane at Roanoke's Woodrum Airport January 10 to pick up a box that contained a "first" for Virginia.

There were some 11,000 coho salmon eggs in the box.

Shumate, who is fish cultural supervisor for the Commission of Game and Inland Fisheries' Fish Division, returned the eggs to the state fish culture station at Marion.

The eggs were shipped from Oregon and are the first to be obtained by the state. They were in the "eye" stage, meaning that they were already developing, when the plane landed them in Roanoke.

After the fish reach fingerling size, they will be stocked in Smith Mountain Lake and Philpott Reservoir in Southwest Virginia.

The coho is the species of Pacific salmon that has been introduced into the Great Lakes with spectacular results. Some weighing between 15 and 20 pounds have been caught there, although the hulk have gone to 5 to 8 pounds.

Fish Division Chief Jack Hoffman has said that he does not anticipate that their growth in Virginia waters will equal



Fish Cultural Supervisor, Dixie Shumate, Sr., receives the first 11,000 coho salmon eggs to come to Virginia.

that of those in the Great Lakes or the ocean.

Fingerlings from the first batch of eggs probably will be released in the fall, according to Hoffman. If the cohos survive after being stocked, they should show up in the tributary streams of Smith Mountain and Philpott during the fall of 1970 when the spawning urge develops. But, according to Hoffman, it is almost a certainty they will not find suitable areas for successful reproduction. This means that, if the coho experiment is successful, the salmon would have to be maintained in future years through annual artificial stocking, as are trout, muskellunge, northern pike, and striped bass in some state waters.

ALL of the trees on our knoll above the Hazel River, except the evergreens, had been peeled to the bone by winter. A few dried oak leaves fell each day, pushed by new growth. Early spring rains broadened and deepened the river as it mirrored the bare trees overhead. It was now late March and every twig was swollen, ready for the cold to end. We watched from the kitchen windows for the wood ducks to return.

We thought we knew about ducks. To us they were waterfowl with short legs placed far back on the body for swimming, with webbed feet and long flat bills. As far as we knew they belonged on the water or near it unless in the air in migration. That is, until three years ago, when we saw a small pair of ducks traipsing around on the bare branches of a sycamore tree at the end of the yard on a cold March day. Ducks in a tree? It seemed incredible.

Later in the summer when a small flotilla of ducks sailed down the river we still did not associate the ducks in the water with the ducks in the tree. The next year a pair was back a little earlier in March, but by then we had learned that they were wood ducks and equally at home in trees as in water. We tried to watch this pair and finally saw their nest hole in a snag of a tree, but missed the dramatic moment of the skydiving infants.

Last year the ducks arrived on March the twenty-first and to our great pleasure there were three pairs. Somehow we sensed their contentment as they wandered through the sycamore branches. Their flight was swift and silent from tree to tree as each bird checked that the Hazel River still flowed, there were the same hollowed trees, and the oaks had scattered acorns with abandon.

Wood ducks are beautiful. The drake wears the most gorgeous colors of any duck in America. It has a backward flowing crest of iridescent, purplish-green on a rather large head. Its throat on a short neck is white and the breast a rich cinnamon-brown. In the sunlight he appears to be a bronzed work of art.

The female is a darker brown and also crested but not with color. She has no bright markings except for the white ring around each eye running into a streak behind. They are small birds by duck standards. Their name is a combination of Greek and Latin terms, AIX SPONSA, meaning Waterfowl in Wedding Dress.

We determined that this year we would duck-watch constantly, which turned out to be a frustrating, time-consuming but rewarding business. We soon realized why the Hazel River attracted them. Although there are many duck species with some resemblance, few have precisely the same requirements. Each species knows its own special niche in the water-world, which it uses more efficiently than any other duck. The wood duck is one of the few that nests consistently in trees. It positively will not nest on the ground, even if it has to go to distant woods to find a suitable place. Trees are the backbone of their lives. Because they perch in trees they have longer legs than do most ducks.

Most of our riverside trees are root-drowned and dead, others are hollowed by age, storms or the pileated woodpeckers. The cavities in the trees provide homes for the wood ducks. They also like lush underbrush around ponds, lakes, and streams, as they eat vegetation. The roots and bulbs of water plants are used as well as seeds and leaves. A large part of their diet is made up of insects which they find on the surface of the water or on the stems of water plants. They also scratch about on the earth for acorns and berries in season.

Waterfowl in Wedding Dress

By KATHERINE W. MOSELEY
Rixeyville



Photo by Karl H. Maslowski

We soon found that wood ducks nest in places that are very inaccessible for people. We watched from our knoll and from a riverside bench with binoculars. For about three weeks they spent the midday hours in the bare trees and we could tell that the females were househunting. One after another would squeeze into a pileated hole that seemed impossibly small or examine hollowed crotches in the old trees. Usually the males seemed bored and went to the river. Undoubtedly the female of each pair chose her nest. In the late afternoon all six of the ducks swam and fed together in the water.

It was during these times that often all six would take off on propeller-driven wings to fly upstream following the river around the horseshoe bend as they squealed loudly. After a time they floated lazily down the river with the current until they rounded the bend below our place and were out of sight. The ducks do not quack but have more of a squealing whistle "Quoo-wee."

When the actual nesting began, and where, we could not tell. The trees were then in full leaf and curtains of green screened much of the river. The males were frequent swimmers, and several times we saw the females as they dabbled in the shallows for food. We suspected that they stayed close to the nest, but in one case at least we were all wrong.

We did know that the mother would not start incubation until the clutch was complete so that all of the young would hatch at the same time. We also knew that her only nest preparation was to wrap the eggs in a blanket of down plucked from her own breast.



Lack of nesting sites in hollow trees is the main factor limiting wood duck numbers in many areas. Properly constructed and located nesting boxes like that shown above can have spectacular results in producing new local breeding populations or increasing established ones. Building and placing such boxes is an excellent group or individual wildlife conservation project.

One morning at the last of May I saw a large white petal flutter to the ground from a dead tree across the river. On our high knoll it is easier to see the other riverside than our own. I grabbed the binoculars and yelled for my husband. It was indeed the young leaving the entrance hole in the old dead tree. The mother walked the earth below softly calling "Paaay." Or it may have been "Peeey." Each tiny duck appeared at the hole and tumbled with outspread wings like miniature, fluffy parachutists to join the mother. The mother called and coaxed until undoubtedly the last duckling was peeping loudly beside her. She then led her little brood of eight to the river.

There are many stories told of how the mother duck gets her young out of the nest and into the water. It has been said that she only nests over the water and pushes them out of the nest; that she carries them one by one in her beak by the neck; that she flies to the water with a baby duckling on her back each trip. Perhaps, like human mothers, each has her own way. The ones we watched made the daring dive alone. It is positive that the young are provided with sharp claws which enable them to climb up the nest cavity to the entrance hole and that the small birds are padded with light airy down so that when they plummet they strike the earth as softly as cotton balls.

After watching this exhibition we were satisfied. It was an utter shock that we heard baby chicks "peeping" when we walked through the woods to the spring-run. Yes, it was a parade of nine ducklings led by the mother from what must have been their nest in an old hollow stump of a tree high on the slope. They were on their way to the run that opened into the river. The ground must have been torturous on day-old feet. The mother had no choice but to keep going. We stood very still and were glad that no harm came to them on the most dangerous journey of their lives.

Wood ducks have many enemies, cats, foxes, raccoons, snakes, hawks and the water predators such as snapping turtles, weasels, and mink. And man! The species nearly disappeared for a while. They were hunted by man for flesh or for feathers for his artificial trout flies. Their homesites became urbanized. Since legal protection has helped wood ducks make a spectacular comeback, their main problem is housing as too few hollow trees still stand near water. Man-made nesting boxes are acceptable if placed on poles over water or on a tree beside a pond or wooded stream. These artificial nests have certain requirements for safety for the birds. Write the Wildlife Specialist, Agricultural Extension Service, Virginia Polytechnic Institute, Blacksburg, or the Commission of Game and Inland Fisheries, Richmond, for plans.

We have no idea where the third pair of this year's ducks nested. That they did was evident one August afternoon. Beyond our river border lies a marshy pool formed by the river on a neighbor's land. If our count was correct, there were twenty-three young ducks in half-grown plumage in the pool. All of the crests were evident and the wings of the males were even tinged with greenish luster. Some rested on fallen logs, some swam, a few nibbled on greens. It was a once-in-a-lifetime picture to cherish.

The fall migration for the wood duck seems to depend on the weather. We have seen them on the river as late as October. Where or how far south they go, we do not know. We and the river miss their beauty when they are gone. However, we now know, when March winds finger dried oak leaves and the sycamore's boughs are bare, Waterfowl in Wedding Dress will return to the empty trees and ever-flowing river. Such is the constancy of nature.

Trout Time, '69

By F. N. SATTERLEE
Information Officer

TROUT SEASON!! . . . that magical time of year that just might have been the origin of "playing hooky" gets under way at noon on April 5, 1969. If the trends established during the 1967-68 season are any indication, a significant increase in all state fishing can be expected again this year. Coupled with the 13% increase in the sales of resident fishing licenses during the past season was the even more impressive jump of 15% in the sale of trout licenses. Nearly half of this increase occurred during the height of the season.

License requirements remain the same for the coming season with county resident fees being \$2.00, resident statewide license fee \$3.50, and non-resident statewide \$10.00.

State and county residents, in order to fish in *designated waters which have been stocked with trout*, must obtain a \$1.00 trout license in addition to the regular fishing license. The price of a non-resident trout license, which permits fishing in these designated stocked waters, is \$5.00 in addition to the regular license.

Available again this year, in lieu of a season license, is the "three-day" license at \$1.50 for resident and non-resident alike when fishing in the fee fishing areas where both license and daily permit are required. Without an appropriate county or state license, non-residents and residents may obtain a \$3.00 license to fish for trout in the Shenandoah National

Park or the Blue Ridge Parkway. This license is good for three consecutive days of fishing.

Creel limits also have not changed, with 8 per day being the total take allowed from streams. Both the fee fishing areas, Douthat State Park and Big Tumbling Creek, continue with a daily limit of 5, as do all the large impounded public waters such as Philpott, Flannagan, South Holston and Gatewood Reservoirs, and Smith Mountain Lake and Carvins Cove. Smith Mountain Lake, Flannagan Reservoir, Carvins Cove and Philpott Reservoir are open year-round for trout fishing.

The fish-for-fun locations, Rapidan River in Madison County and a portion of Cedar Creek in Russell County, will open at the same time as the rest of the state. Only artificial lures with a single barbless hook may be used. No fish may be kept in possession in these specially designated areas.

STOCKING . . . again this year shows a considerable increase over previous years with a record 989,550 trout being released by the State and an additional 265,050 trout released by the U. S. Forest Service under the co-op plan, for a grand total of 1,254,600 trout. A breakdown of this total, by species, shows brook—231,850; rainbow—930,200; and brown—92,550.

Of this total, 299,100 will be released during the two in-season restocking programs which are planned as usual for May. Two streams have been added to the June-September in-season stocking programs. They are Big Stony Creek in Shenandoah County and Little Reed Island Creek in Carroll County.

LEGEND:

*—National Forest Waters
B—Brook Trout
R—Rainbow Trout
BR—Brown Trout

1969 Stocking Plan

	Period Stocked				Period Stocked		
	Preseason	May	June		Preseason	May	June
ALBEMARLE CO.				Puffenbarger Pond*	B		
Moormans R., North & South Fork	B,R	B,R		Elkhorn Lake*	R	R	R
ALLEGHANY CO.				Little River*	R		
Jackson River (Gathright)	R,BR	R,BR	R	BATH CO.			
Potts Creek	R,BR	R,BR		Bullpasture River	B,R,BR	B,R,BR	R,BR
Smith Creek*	B,R	R		Jackson River (#623)	B,R	B,R	R,BR
Simpson Creek*	B,R	B		Jackson River (Gathright)	B,R,BR	B,R,BR	R,BR
Pounding Mill Run*	B,R	R		Back Creek	B,R	B,R	
Jerry's Run*	B			Spring Run	B,R,BR	B,R,BR	R,BR
Clifton Forge Res.*	R	R		Little Mill Creek*	B		
AMHERST CO.				Back Creek*	R	R	R
S. Fk. Piney R. & Piney R. Proper	B,R	B,R,BR	R,BR	Left Prong Wilson Creek*	B	B	
Pedlar River (upper)	B,R	B,R	R,BR	Mares Run*	B	B	
Pedlar River (lower)	B,R	B,R	R,BR	S. Fk. Pads Creek*	B	B	
North Fork Buffalo River	B,R	B,R	R,BR	Muddy Run*	B	B	
Brown Mtn. Run*	B	R		Jackson River (Hidden Valley)*	B,R	R	R
Davis Mill Creek*	B	R		Piney River*	B		
Enchanted Creek*	B,R	B,R		Lick Run*	B	B	
Little Irish Creek*	B,R	B,R		BEDFORD CO.			
Pedlar River*	R	R	R	Hunting Creek*	R	R	R
Rocky Row Run*	B	R		Battery Creek*	R	R	
S. Fork Piney River*	B	B		BLAND CO.			
Statons Creek*	B	B		Wolf Creek	B,R,BR	B,R,BR	R
AUGUSTA CO.				Laurel Creek	B,R		
St. Mary's River	B,R	B,R	R	No Business Creek	B,R	B,R	
North River*	R	R	R	Lick Creek	B,R	B,R	R
Trout Run*	B			Laurel Fork	B,R	B,R	R
Buffalo Branch*	B,R	B,R		Lick Creek*	R	R	R
East Dry Branch*	B,R	R		BOTETOURT CO.			
Jerkentight Creek*	B,R	B,R		Jennings Creek	B,R,BR	B,R	R,BR
Ramsey Draft*	B,R	B,R		Mill Creek	B,R	R	R,BR
Braley Pond*	R			Roaring Run	B,R	R	R,BR
Back Creek*	B,R	B,R		North Creek*	R	R	R
Johns Run*	B			Middle Creek*	R	R	R
Kennedy Creek*	B			McFalls Creek*	R	R	R
Upper Sherando Lake*	R	R		Cornelius Creek*	R	R	R
Lower Sherando Lake*	R	R					
Heartstone Lake*	R	R	R				

(Continued on page 25)

NATIONAL SHOOTING DOG CHAMP NAMED AT HAWFIELD

By TRUMAN F. COWLES
Manchester, Conn.



Champion Easy Mark, posed by owner Manuel Casado of Wichita, Kansas, with the Guy E. Lewis Hawfield Trophy.

EASY Mark, an orange and white pointer dog who will be five years old next May, triumphed in a field of thirty-nine starters in the eighth annual running of the National Open Shooting Dog Championship, staged at Hawfield during the week of December 2-6. The champion is owned by Manuel Casado of Wichita, Kansas, and was handled by Dean Lord, a professional trainer from San Saba, Texas. In the superior effort which gained him the crown and the purse of \$1500, the courageous pointer chalked up four finds on coveys and two on single birds, plus demonstrating his superb manners in honoring his braccemates' points on two occasions. Heats were of one and a half hour duration, and the winner ranged consistently to fine range, responded in close harmony with his handler, and maintained a strong pace right up until he was ordered up at the conclusion of the heat. Strong challengers in the competition were Hideaway Bet, a female who was braced with the winner. She is owned by Paul E. Stubbs of New Hope, Pennsylvania, and was handled by Ed Mouglin of Gaithersburg, Maryland. Hedgehopper Tex, who recently won the Texas Open Shooting Dog Championship, was another dog piloted by Dean Lord, and he charted four finds of sterling character but lacked the strong finish of his kennel mate in establishing his challenge. Bennett's Rambling Bud, owned by Mr. & Mrs. O. C. Bennett of Aurora, North Carolina, who were on hand to see him perform under the guidance of trainer Harvey Jordan, offered a strong bid on the last day of the running. Bud chalked up three finds and a pair of backs, plus a real strong race to be in contention. Lil's Pride 'n Joy, another pointer piloted by Dean Lord, also showed well on the final day, with three covey finds and a couple of complimentary honors of his braccemate. It was an exciting stake in one phase or another, each of the

five days, and veteran observers who have seen the running in other years were of the opinion that it was the best in general quality of the eight events since it was inaugurated in 1961.

Praise was forthcoming from all quarters as visitors from far and near voiced their approval of the fine efforts that have been put forth by the Game Commission, who manage the plantation. Most were in accord that cover conditions and feed patch plantings were in the best shape that the area has ever seen. An accurate tabulation of game population accounted for a total of eighteen coveys of bobwhite quail in the first hour and one half course, which lies generally along the westernmost portion of the area, and sixteen coveys on the second ninety minute layout, which lies on the eastern part of the tract. Chief of Game Division Dick Cross, Jr., is a Director of the organization known as the National Shooting Dog Championship Association, in company with a coterie of prominent field trial personalities from this area. It is under the management of this group that this Championship is conducted and sponsored. Parke Brinkley, former Commissioner of Agriculture, and a long time field trial associate, is President. He resides in McLean, Virginia; Verle Farrow of Fairfax, who has been prominent in bird dog activities in the Old Dominion for a decade or more, is Secretary-Treasurer; W. S. "Steve" Richardson of Richmond is Vice President, and a most active participant in club affairs. Harold Crane of Port Republic, Maryland, Les Tichenor, Jr., of Landrum, South Carolina, Stuart Lewis, son and heir of the late Guy Lewis, Dr. Thomas Flanagan of Norwich, New York, and the most recent addition, Dr. H. Q. Tucker of Orange, Virginia, make up the balance of the Board of Directors of the sponsoring group.

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Hideaway Bet, left, owned by Paul E. Stubbs, New Hope, Pennsylvania, and Bennett's Rambling Bud, owned by Mr. and Mrs. O. C. Bennett of Aurora, North Carolina, gave the champion strong challenges.



White-Footed Deer Mouse

By ALBERT G. SHIMMEL
West Decatur, Pennsylvania

AN occasional flame leaped above the hickory logs that glowed in the fireplace. Shadows danced briefly against the cabin wall then lost themselves in the soft light of the fire. Fragrant shaving curled from the stick of dry pine under the pressure of the keen blade. They fell in a little heap on the flagstone hearth. There was enough to start the morning fire but pure pleasure of the task compelled me to continue until the stick was gone. Among the shavings were bright fragments of bittersweet berries. The previous autumn we had decorated the plaque above the fireplace with twisted vines, heavy with the clusters of the bi-colored berries. Now only the orange husks remained.

We had closed the cabin after a Christmas holiday. Other responsibilities filled the busy days. Now spring had come. The snow had melted from our sunny slope although some soiled patches still remained among the hemlock and the rhododendron in the swamp below. It was pleasant to come back again.

The plundered bittersweet was not the only sign that, in our absence, uninvited guests had moved in and made themselves at home. A cake of soap, forgotten in its plastic tray, had been reduced to but a remnant of its former size, and what remained was scored and notched by tiny teeth.

I glanced toward the corner shelf. One autumn afternoon I had a bit of luck. A brace of grouse had fallen to my gun. In memory of that day I spread the tails and pinned them to a piece of wood to dry. The fluffy coverts from the tails were gone. Only the naked fans remained.



A tissue box lay on its side under the table. Not a trace of the tissues could I see.

The darkness settled down. I leaned back in my ancient hickory chair and stretched my legs toward the fire. Across the hearth, Ruth watched the flames through half-closed eyes. Suddenly there came a sound that brought us to our feet. It was as if a pack of hounds were running at full cry along some distant hill. We left the fire and walked into the night. We stood there hand in hand while up from the south they came, a wavering, clanging, chanting wedge of geese, heading in the direction of the lake. We watched them as they passed, dark silhouettes against the stars. We heard their rhythm change to excited gabblings. They had found sanctuary for the night and all was still.

We went back to our fire. The magic spell of birds, the night and spring made words of trivial consequence.

The woodbox stood beside the hearth, its logs on end. A deer mouse climbed to the top of the longest log and looked toward the fire. Its ears seemed a size too large. They were so transparent that in the firelight they seemed translucent pink. With large eyes, brightly alert, it made a survey of the room. Our eyes confirmed the reason why the name deer mouse was appropriate. The color of the back is the exact tawny shade that marks the whitetail's summer coat. The white on belly, face and legs completes the illusion that both deer and mice had colors taken from the same palette.

The deer mouse has several aliases. It is commonly called wood mouse, acorn cutter, squirrel mouse, singing mouse as well as the more common name of white-footed mouse.

It is an interesting animal. It keeps its soft fur immaculately groomed. To watch it at its toilet is to see a demonstration in animal thoroughness. It seems more squirrel than mouse. Darting along branches of trees or climbing through thickest underbrush it exhibits sure-footed grace. In saturated swamps or desert lands it finds a home. Hardly a spot from the Arctic Circle to the humid tropics where it does not thrive.

One winter day I strolled aimlessly through a thicket of crabapples overgrown with green briar. I found a summer robin's nest, roofed with a dome of grass and topped with snow. The door, set neatly at one side, was plugged with rabbit fur. I tapped the branch below it with my stick. A second time I knocked, and then a deer mouse pushed its head out of the hole as if to ask why it had been disturbed. I made my apologies by placing an ear of corn upon a sharpened stub. When next I passed that way the corn was gone.

Our cabin boasts a picture window facing west. Outside a well stocked feeder draws the birds. At night their place is taken by both mice and flying squirrels. One summer night when moonlight filtered through the trees, a deer mouse, ignoring the feeder, crouched on the window ledge. Insects, attracted by our light, fluttered against the glass. The agile deer mouse caught them one by one. It ate and ate until its sides bulged with the feast. Now we had an explanation for the beetle shards and wings of moths that cluttered the window ledge at dawn.

A female, live trapped and caged by an Elementary Science class, gave birth to six young. At first they were pink and wrinkled. Their skin was so transparent that their digestive organs were plainly seen. At thirteen days they had trebled their weight, their eyes were open and they began to experiment with solid food. At this stage of their development, five young from a litter left motherless by accident were introduced. They matured with the others,

living in perfect harmony.

The juvenile coat is dark gray. At three months they assume the fawn color of an adult which indeed they are. Another generation of mice are on the way. It is unfortunate that most people associate the young with the disreputable, dirty rodent from abroad.

The mortality rate is high. Few individuals live out their first year. Enemies are everywhere. It must be so to hold the race in check. The little creatures are nocturnal by choice. Owls take a heavy toll. Collected pellets seldom fail to have a mouse skull or two. Shrews hunt their runways incessantly. Snakes of the smaller species take their share. Hawks, crows, shrikes and carnivores seek them as a delicacy.

One evening as I approached a woodland pool a deer mouse leaped from a tuft of moss and ran along the log that bridged the pool. Before it reached the other side it fell into the water. I caught a flash of orange, green and gold. The water boiled and then the mouse was gone. For days I haunted that pool but never saw the trout again.

I sat beside the camp spring to watch the warblers as they passed toward the north. A huge decaying stump, relic of the logging days, stood close at hand. Suddenly a frightened squeak drew my attention to a projecting root. A deer mouse dashed into the open closely pursued by a least weasel, rarest of the tribe. They disappeared under the leaves. I heard the drama's end—squeaks . . . a scuffle . . . then silence.

The deer mouse seldom lives a full life span. Its role is tragic. As a huffer species it fills the gaps in empty stomachs and crops, a bread-and-butter lunch for the flesh eaters.

The fire is almost out. Gray ashes hide the glowing coals. I gather the shavings from the hearth and leave a crust of bread as payment for a song.



An Unusual Hunt

By Captain DAVID R. EIKE
Fairfax County Police Department

THE light frost cracked underfoot as I walked quietly across the pasture toward a meadow of second growth pines, cedars and hardwoods that bordered the heavy timbered foothills of the Blue Ridge Mountains.

The time was 6:30 a.m.; the day was the last day of deer season; the place was Warren County, about five miles east of Front Royal along the main branch of the Shenandoah River.

I had located, what I thought to be, an ideal deer stand, several days prior, while rabbit hunting in the same area. This meadow was about five acres in size with a stream running through the lower portion. Surrounding the meadow was an old log rail fence with one section missing right near where I intended to stand. I selected a small clump of pines about fifty yards from this gap in the fence. I might add that there was ample evidence of deer coming from the pasture, through the gap in the fence, into the meadow and "big woods."

As dawn broke through an overcast sky, squirrels began their ambitious foraging for food and on either side of me was the plaintive call of several quail. In a nearby cluster of pines I heard the wingbeat of a large bird flying from the roost—a turkey perhaps?

As I sat there on the hillside admiring the sights and sounds of a fall wilderness, far removed from the everyday drudgery of life, I became aware of a snorting sound directly to the rear. I turned slowly and observed a large doe standing right in the gap in the fence looking over her shoulder. Since I was downwind, I knew she had not winded me, so I slowly raised my model 99 Savage, 243 calibre, and with one shot in the neck, I had my venison. at 8:05 a.m.!!

I was elated!! My first deer in six years! After field dressing and a "check-in" at the local checking station, I found that I had approximately a 135 pound doe in prime condition.

Perhaps by now, many of the readers are saying, "What's so unique about this hunt—it happens every day in all parts of the state?" Let me explain:

First, I am what is commonly called a disabled veteran.

Second, I have implanted in my leg a series of tubes that enable me to be kept alive by a machine.

In other words, I am an artificial kidney patient.

I hope, by relating my experiences, I will encourage other hunters who have given up hunting because of a physical impairment to return to one of the finest sports on earth—the fun of hunting!

Br'er Rabbit and the Country Boy

By THOMAS D. JONES
Warrenton

AS an outdoorsman for my entire life, and one who grew up on over one thousand acres in Culpeper County, a long way back in the country. I would like to speak a few words for the cottontail rabbit as the real bread-and-butter game animal to the country boy of my day.

The first time I went hunting was on a fall day in 1918, with a wooden gun and old "Shep," the farm shepherd dog. We chased a rabbit into a pile of rails in a ditch in a corn field. The corn shuckers got the rabbit out and killed it with the universal rabbit punch administered with the edge of the hand on the back of the rabbit's neck. I'll never forget that walk back to the house with this big fat rabbit and how proud I was to show it to my mother and aunt.

From then on I hunted rabbits with shepherd dogs, trapped them in the fall with rabbit traps (or "gum" as some people called them), shot them sitting with my .22 rifle, or on the run with my 20-gauge shotgun (which I got in my middle teens), or cornered them in a "land" of wheat at harvest time.

Some of the fondest memories of my boyhood are those of going to my rabbit traps on frosty mornings with a black and tan three-legged shepherd dog named Jack. The traps were set at about the time of the first frost, around October 10, and were baited with apples and onions. They were placed at strategic places along ditch banks and at the edges of thickets. I had nine of them, as well as I can remember. I can vividly remember the thrill of seeing the trigger thrown in front of the trap and turning the trap up on end to look inside. If you had a rabbit, he had to be taken out by getting a good grip on both hind legs. Since the rabbit was always turned around and facing out you had to reach under him to get him out. If you tried to take him out by the front legs, just as you got him out of the traps, he would kick and scratch your hands so hard with his toenails that you would be almost sure to drop him. Those rabbits were mighty good when fried the next morning for breakfast and eaten with brown gravy, biscuits, and fried apples.

We used to catch half-grown rabbits in June during harvesting when we were finishing up a land of wheat in a big field. Several of us would corner them or run them down. They were especially good to eat to a boy who had not tasted any game since late fall. I am glad that at that time of my life I had no scruples about killing rabbits on our farm at any time of the year, as I really didn't kill enough to deplete the supply, and I don't think a country boy should be too inhibited in his hunting.

In about 1925 or 1927, when I received my first shotgun (a 20-gauge Winchester pump gun), I remember the colored man on one of our farms having a half beagle hound dog

named Pug. He was a good rabbit dog but would never give up on a cold trail. If I jumped a rabbit, he would never come when I called, so I would have to run him down, pick him up, and stick his nose on the trail. It took so long to get him started on the trail, that even though he ran too fast for a good rabbit dog (he was half foxhound), he would always bring the rabbit back. His speed in trailing the animal compensated for his earlier lack of interest.

Of course, as I got older, I started hunting quail and turkey, and there was always squirrel hunting in September. No one hunted doves in those days. For some reason, however, there never seemed to be anything like the all 'round suitability of the rabbit as a game animal for a country boy to hunt. One lone boy back on a farm a mile and a half from a public road in the 1920's had pretty much to figure out his own recreation, and the rabbits certainly contributed to mine. In fact, about the best catch I remember making one morning consisted of three rabbits, one 'possum, and a black cat.

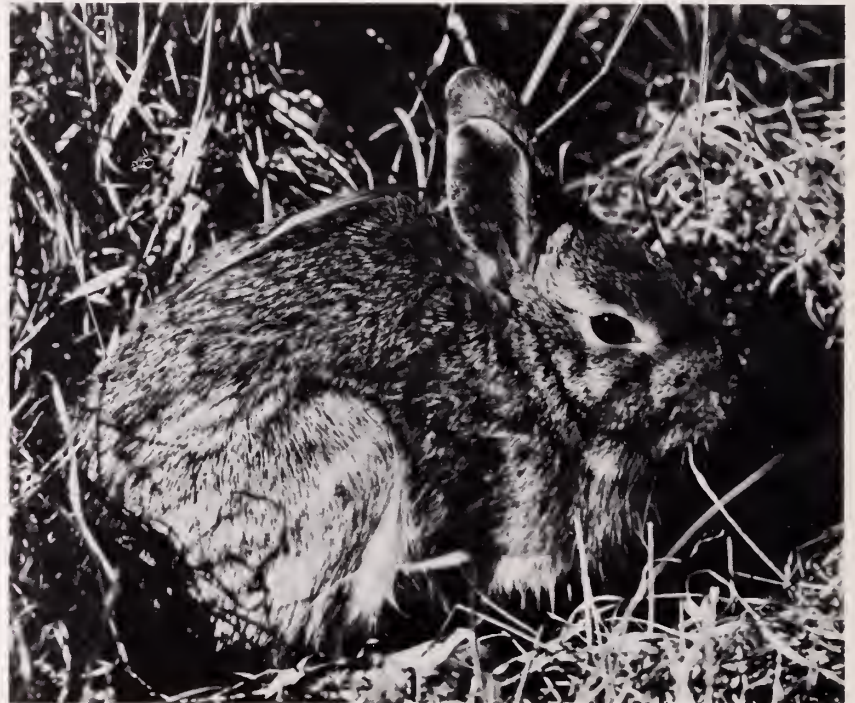


Photo by Leonard Lee Rue III

He has been top game animal to generations of country boys of all ages, and still is.

About ten or fifteen years ago, two friends, John Kreticos and Scorpie Neblett, and I used to take a rabbit hunt each New Year's Day in Fauquier County. John had three good blue tick beagles. I remember one cold January 1 I shot twice at a rabbit going full speed across a barley field and apparently missed, as the cottontail ran into some bulrushes around a pond. The beagles went in hot pursuit; and to my surprise, one came trotting out holding her head high. Hanging from each side of her little mouth was the rabbit, which she laid right at my feet. And, perhaps, best of all, these hunts always ended with the traditional New Year's Day dinner of hog jowl, black-eyed peas, turnip greens, and cornbread, provided by Katherine Neblett in the cosy kitchen of her and Scorpie's comfortable farmhouse.

In retrospect, these days of trapping and hunting rabbits—as a boy and as a man after my own children were grown—seem more than just pleasant experiences; they were a means of achieving rapport with the world of nature, a therapy increasingly less available to our hectic and anxious age.

CONSERVATIONGRAM

Commission Activities and Late Wildlife News . . . At A Glance

BEAR KILL NEARLY EQUALS LAST YEAR'S. Big game kill tags from all of Virginia except the Dismal Swamp reveal that hunters bagged 332 bears in the state last season. This is nearly equal to the prior year's good take of 346 bruin and the fourth highest kill in recent times. Since Union Camp Corporation closed their Dismal Swamp lands to bear hunting last fall, no appreciable bear kill is expected from this section.

The highest kill was reported from Augusta County where 52 bears were bagged. In Rockingham hunters downed 41 bears while Alleghany County ranked third with a take of 31. This was the second year that bear season opened a week ahead of deer season in Virginia.

RECORD FALL TURKEY KILL IN WEST. A total of 3,024 turkeys bagged in the 15 "west of the Blue Ridge" counties open to hunting last fall makes the 1968 harvest an all-time record for that section. An exceptionally good hatch was credited for the upsurge of 100% above last year's kill.

Leading counties include Bath where 476 turkeys were bagged, Augusta with 357, and Boteourt with 292. The big increase in the number of turkeys is not expected to boost the 1969 spring kill much since most of the big hatch will be too young to gobble.

Only 320 turkeys were bagged in counties east of the Blue Ridge last fall under the bearded-turkeys-only restrictions in effect, less than half of the 897 taken in this section during the previous fall season. Combined with the record fall kill west of the Blue Ridge, this makes a total fall turkey harvest of 3,344 for the state. The restrictive fall season in eastern Virginia was adopted to save turkeys and there is little doubt that it accomplished its purpose. A good hatch last spring apparently benefited eastern flocks also.

STATE DEER KILL NEAR 28,000. Virginia's 1968-69 statewide deer kill jumped to 27,932 as final tabulations came in, putting it 3,000 above last year's. This makes it the best deer harvest since 1965 in spite of a general reduction in doe shooting, both east and west of the Blue Ridge. A slight decrease was evident in some western counties, but most of eastern Virginia showed marked increases, up to 40% in some cases.

Southampton County reported the biggest kill in the east with 1,379 animals. Caroline County ranked second with 1,032 deer. An unusual jump in kill occurred in Fluvanna, where 988 deer were bagged following a kill of only 470 the previous year. In Sussex County 965 deer were reported.

The shift of doe shooting from the beginning to the end of the seasons did accomplish the desired reduction in the number of does killed both east and west of the Blue Ridge. This brought the percentage of does in the harvest from 35 to 40% down into the low twenties or below in most counties. Game technicians consider a harvest of 35-40% does the maximum that the average deer herd can support without reduction.

165,797 FURS TAKEN IN VIRGINIA LAST SEASON. Virginia trappers sold 165,797 pelts during the 1967-68 fiscal year, according to reports supplied to the Game Commission by fur buyers. Muskrat hides, although down considerably from last year, were still the most numerous item totaling 120,471 pelts. The fur catch also included 19,160 raccoon pelts, 10,048 deer hides, 7,247 opossum skins, 2,948 beaver pelts, 2,437 mink and 2,092 skunk pelts. Red and grey fox skins totaled 2,682 and 559 otter pelts were taken during the year. Only 4 nutria skins were reported.

The total fur harvest was again down from the 270,766 reported last year. Much of the decrease was in the number of muskrat pelts, which are often bringing less than one dollar each on the market. Most other fur species were below the 1966-67 harvest level also.



With its bright red, persistent berries *Smilax walteri* is surely deserving of more attention by horticulturists as a native ornamental plant.

horticultural subject. As I stood there admiring the fruit in its riot of color I recalled Thomas Walter, the South Carolina botanist of the 18th century for whom this red-berried greenbrier was named, and was amused again to remember that Walter, when he had difficulty with the proper classification of a plant, would relegate the specimen to his genus *Anonymous*—a genus *pro omnibus dubiis*, a sort of botanical wastebasket.

Attractive Native Plants Abundant

By DR. J. T. BALDWIN, JR.
College of William and Mary



PLANTS of the Virginia Coastal Plain are a constant source of wonderment for me, and the better I know them the greater are the pleasures they afford. An account of a fifteen-minute foray along Powhatan Creek in James City County on December 20, 1968, will illustrate what I mean, and photographs made in the studios of Colonial Williamsburg by Charles G. Kagey will supply a visual record of some of the plants observed on that little excursion.

I was driving on Route 31 toward Jamestown when a bright red in a cypress swamp attracted my attention, so I stopped and made a muddy way through a thicket of red maples, black gums, and bayberries and stumbled over cypress knees and fallen logs to determine what was so beautifully colored. It was the fruit of *Smilax walteri*. There this greenbrier climbed in a tangle of tendriled stems, to heights of fifteen feet, vines without leaves and heavy with a crop of bright red berries. This handsome plant was introduced into cultivation a century and a half ago but is seldom grown. Not commonly encountered on the Peninsula of Virginia, it is known from New Jersey to Florida and thence to Louisiana. What a decorative plant for the Christmas season and later! The fruit is handsome throughout the winter. Surely *Smilax walteri* almost demands increased use as a

Nearby were quantities of spicebush, easy to identify by the odor or taste of broken twigs and, in March, by the yellow flowers that open before the leaves come. Its name is *Lindera*. Red bay, a relative of spicebush, was there; *Persea*, red bay is called, and this is likewise the genus of avocado, a prized fruit which we especially associate with Central America—but which is now widely grown in warm parts of the United States. Red Bay has a fruit that is an avocado in miniature, consisting, however, of a seed and skin and no edible flesh. *Persea* is not common on the Peninsula of Virginia, but in many other areas—as the Dismal Swamp—red bay is a dominant element of the flora.

Scrambling over trees and shrubs to heights of twenty feet was the laurel-leaved *Smilax laurifolia*. A plant not common with us but in other places abundant. We saw on those evergreen plants the greenish berries of the season just ending and the blackish berries of the previous year: it takes two years for the fruit of this greenbrier to mature. Though introduced into cultivation more than two hundred years ago, this plant has been largely neglected; it deserves to be used. The foliage of wild plants is sometimes cut for the market.

In comparable places, though often preferring drier ground, was the cross-vine (*Bignonia*), so-called because the

stem in transverse section shows the pith to have the shape of a Greek cross. Demonstration of this character fascinates the uninformed, and re-examination convinces the initiated that the pith of this vine really does have that odd configuration. The plant bears a profusion of beautiful reddish-orange flowers, large and showy, in the spring and through the winter holds curiously purple leaves. The vine makes an especially attractive pattern when it climbs a pine, which

and in Virginia's Coastal Plain

Colonial Williamsburg photos by Kagey



laurel-leaved greenbrier, *Smilax aureifolia*, introduced into cultivation two centuries ago, is now largely neglected.



Above, old fruits and new catkins of common alder, *Alnus serrulata*. Right, *Aralia spinosa*, Hercules' club, or Devil's walking stick. Below, whorls of bright red berries are retained far into the winter by the deciduous whorled holly, *Ilex verticillata*.



it might ascend fifty feet before it produces a lofty array of flowers.

Dense stands of the common alder (*Alnus serrulata*) were at the edge of the swamp. These shrubs and small trees were beautiful with their old fruits and the catkins of male flowers that will be prodigal with pollen in early spring: relatively little of the pollen will fall on the scaly spikes of female flowers that are barely recognizable in December. Few people pay heed to the alder, so common it is that this fine woody plant is taken for granted. Yet, in 1957, at the dedication of Phi Beta Kappa Memorial Hall at William and Mary, many visitors admired the alders growing in the indoor planters: there, against a background of black walnut panels and marble, the alders had an oriental look.

Not far from the alders along Powhatan Creek was a population of *Ilex verticillata*. This deciduous holly has whorls of bright red berries that are held far into winter. It favors a frequently flooded situation but thrives when planted in a much drier place. Individual trees may attain a height of twenty feet. Onset of autumnal cold turns the leaves blackish shortly before they drop; hence the name, black alder. It is, however, a true holly (*Ilex*), not a true alder (*Alnus*). Common names are often confusing.



(Continued on page 16)

Hercules'-club (*Aralia spinosa*) was there, as it is throughout this whole part of the state. Each tree has an upright thorny stem terminated in late summer by masses of greenish-white flowers that mature into clusters of black fruits heavy enough in the aggregate to bend the small tree to one side. Before they fall, the decompound, prickled leaves of great dimensions give this plant a tropical aspect. In December the interest lay in the characteristics of the naked stem which appropriately is called the Devil's walking stick: the terminal bud, the nodes, the spines, the internodes, the leaf scars, the vascular scars, the girdle scars, the lenticels—all of them traits associated with an academic understanding of a stem—were accentuated and dramatically expressed. *Aralia spinosa* is a good horticultural subject throughout the year, with a single major fault of suckering freely from the roots.

Heavily fruiting vines of *Dioscorea villosa* were along the roadside. The sexes of *Dioscorea* are on separate plants, and, of course, the male bears no fruit. The aerial stems were dead in December, but the underground stems (rhizomes) were alive and rich with stored-up food for next year's growth. *Dioscorea* is the genus of true yams, which are not to be confused at all with those sweet potatoes that are called yams and which belong to the morning glory family. Again the common names are misleading. Some yams are important



Heavily fruiting female vine of the wild yam, *Dioscorea villosa*.

food in many tropical areas, and the rhizomes of certain species are sources of chemical compounds (precursors) from which sex hormones and cortisone are synthesized. None of the three species in the eastern United States is useful in these respects.

I invested fifteen minutes of December 20th (1/96th of that day) in the plants of Powhatan Swamp, in just a fraction of its plants. What were the dividends? Relaxation and escape from pressures that each of us has in one guise or another. Appreciation of the beauty that was all about. Reassurance that a common plant like the alder has those values that Walt Whitman found in "elder, mullein, and poke-weed." Renewed awareness that parcels of our natural resources must be preserved for unborn generations of man and that threats to his inheritance must be met. Realization again that plants have meanings, that they testify to verities without the need of mathematical proof, that they bequeath themselves to the nurture of all present and future organisms, and that each kind of plant has a fitness and a beauty and a significance peculiar to itself.

I have had a compulsion to write about that brief visit into the swamp, for I deeply believe that anyone with an educated eye and an open mind can greatly benefit from excursions into places that have not yet been ruined and which I hope will never be spoiled.

RIGHT within the pushing arc of our headlights, a small creature rowed himself frantically across the road and pitched himself over the curb just in time. The movement had been sudden, but that lumbering gray body, pointed face and long tail, had given him away as an opossum; and right in the thick of a residential area, at that! The opossum is one country animal for which the nostalgic need not pine, because he has the adaptability of a professional mooch. And it is possible for him to show up anywhere. Though, of course, you will really not see him too frequently, at large. The reason for this is, he hunts at night. Even in captivity, he will hold to this pattern. This is why he is not a good zoo showman. In the daytime he looks lackadaisical and dull. He is night people. He doesn't turn on for the public the way a squirrel or a raccoon might. His gray face, staring eyes, frowzy coat and too much tail give him a moronic look. He is no matinee idol, that's certain. He appears to be pretty much of a square. And yet that little opossum has received an outstanding amount of attention.

Wouldn't you know a character like this would have some sort of specialty? The opossum, in fact, has several. He has aroused curiosity and speculation both idle and professional. Naturalists have watched him interminably. Audubon has noted him with the same detail he devotes to many other, more glamorous specimens.¹ Science has found in him a likely study in many areas, particularly in embryology,² and recently, in journeys into the delicate area of bone regeneration.³

And so, about these specialties: he is the only North American marsupial. This means the mother carries the young in a pouch outside of her body until they have reached a fairly self-sustaining stage. This means, furthermore, that the mother's "infant care" is a very portable chore. She allows her babies considerable latitude after they leave the pouch, continuing to furnish them long-term "opossum back" rides, before they take the big plunge.

How the young get into the pouch in the first place has aroused the greatest amount of popular curiosity and argument and myth. Even right into the present, people lose their tempers arguing the ancient mumbo jumbo that the young are conceived through the nose and then sneezed into the pouch. Audubon himself did not consider it beneath him to mention this myth and deny it.

Many have tried to watch the birth process, but Carl G. Hartman and his wife are the first recorded ones to witness the complete show.⁴ The young are born when they are smaller than bees, and they at once begin a frantic climb into the mother's pouch, located on the outside of her abdomen, and wherein a specified number of milk faucets await the doughty little opossums who make the trip successfully. In nature's crude way of rounding off her own figures, more opossums are born than milk faucets are provided. It is not unlikely that the mother might give an assist during this climb into the pouch, but nothing is officially recorded in this respect. All that is admitted to record is that the mother does lick the mucus from the young to keep them from smothering. But the presence of her nozzle in the vicinity no doubt gave rise to the original fantasy about the young being sneezed into the pouch.

PLAYING?

By
VIRGINIA PALMATARY MOSELEY
Norfolk



Leonard Lee Rue III photo

Being born is certainly the opossum's primary accomplishment. The fact that so many of them are born provides the first answer to why the species has survived. Other features help him to overcome adversity and continually expand his habitat. That pointed jaw contains fifty sharp teeth—another first—more teeth than any other American land mammal.

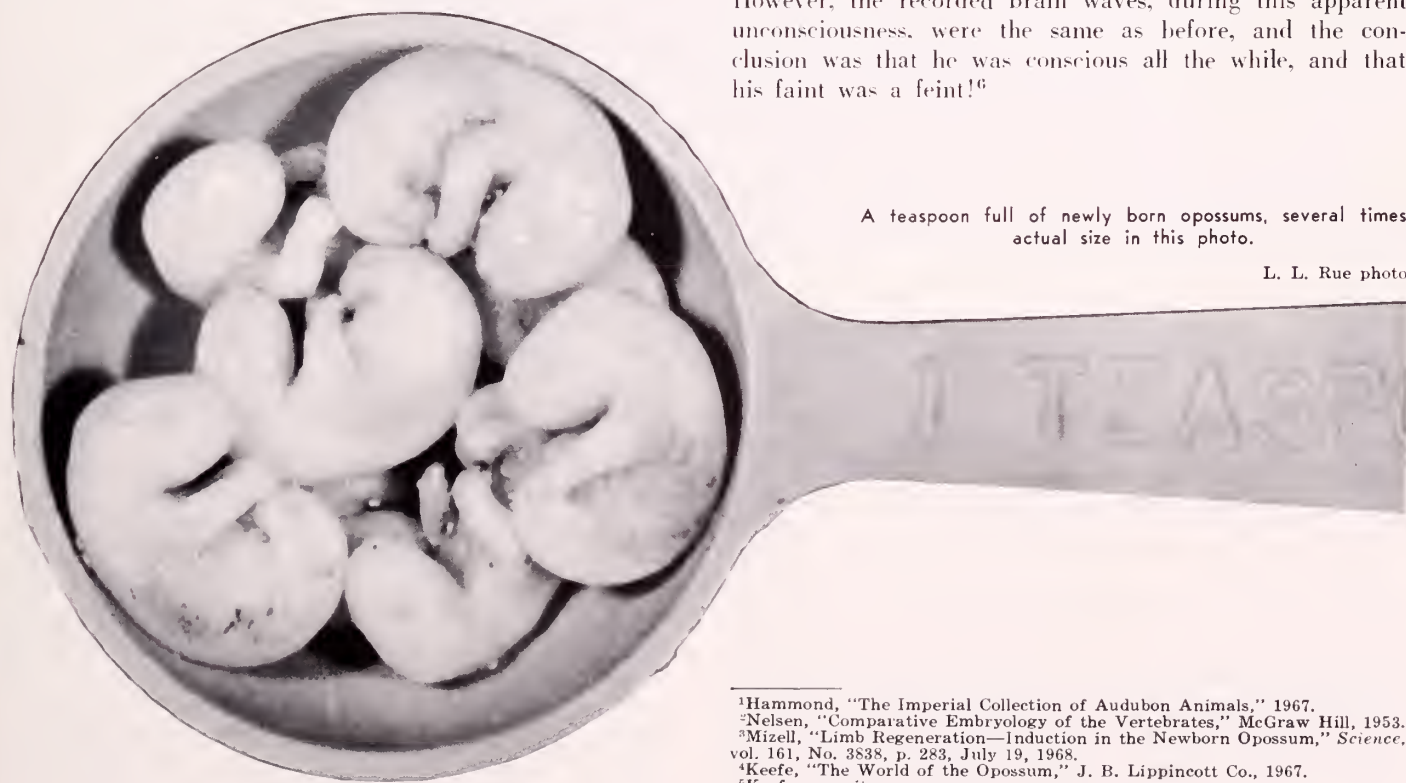
But he is not fierce. All those teeth are for utilitarian purposes, to wit: eating. Meat is perhaps his first choice, and it need not be so choice. Unfortunately, the most prob-

able place to verify the opossum's presence in an area is on the highway—where he regularly makes himself a statistic. And the most likely explanation for his presence on the highway in the first place is that he was attempting to make a meal off a previous unfortunate.

Besides his well-furnished jaw, there is certain other emergency equipment. His forepaws and feet, which so remarkably resemble human hands, are very practical for seizing and climbing. His ample tail is in constant use, but chiefly for balancing. The tail is described as "prehensile": however, there is no unusual strength in this grasp, only a steadying. The tail serves as a rudder as the opossum rows himself along, letting front and back paws down at once, first on one side, then the other, achieving his characteristic pitching walk. Also, he uses the tail as a rack and a baling wire for packing and hauling leaves, straw and what-not for his bed.⁵

Other factors contribute to the opossum's perpetuation. His bones mend rapidly. He is adaptable to climate, his body temperature being able to accommodate most weather. He suffers, but he persists, in the cold areas. The opossum can make himself at home in a second-hand shelter, or burrow, if need be. Literally, he is thick-skinned, over most of his body except his ears and tail. These give him the most trouble in severe climates. He is a good garbage disposal unit, since his admirable appetite is able to match his hunger with whatever is at hand. He does not constitute a real nuisance. All this, added to his prolific nature, and the pouch system to give him a headstart, augurs well for the opossum's presence with us for some while yet. He loves Suburbia and he is doing fine there.

On a recent occasion a group of biologists decided to find out whether the opossum was playing. They tested an opossum under normal conditions, using a machine which detects brain activity. Then the subject was badly frightened by a loudspeaker reproducing the barking of a dog. (It is to be supposed that responses to canned sound can be erratic in some of us.) The opossum went into his well-known trance. However, the recorded brain waves, during this apparent unconsciousness, were the same as before, and the conclusion was that he was conscious all the while, and that his faint was a feint!⁶



A teaspoon full of newly born opossums, several times actual size in this photo.

L. L. Rue photo

¹Hammond, "The Imperial Collection of Audubon Animals," 1967.
²Nelsen, "Comparative Embryology of the Vertebrates," McGraw Hill, 1953.
³Mizell, "Limb Regeneration—Induction in the Newborn Opossum," *Science*, vol. 161, No. 3838, p. 283, July 19, 1968.
⁴Keefe, "The World of the Opossum," J. B. Lippincott Co., 1967.
⁵Keefe, op. cit.
⁶*Science Digest*, vol. 63, No. 3, p. 79, March, 1968.

Mostly About Biology

By CARSTEN AHRENS
Pittsburgh

SCIENTIFIC names are fantastic evils, but I suppose they are necessary. The English sparrow has many names . . . often unprintable . . . but among scientists around the world this bird is called *Passer domesticus*, and so there is a minimum of confusion.

I'll always remember when I really had my nose rubbed in scientific terms, and if it hadn't been for a wise landlady and my chariness, my knowledge of the proper names for our flora would be nil.

I went to the Ohio State University one summer and signed up for a course called "Local Flora." A fine young chap, Lawrence Hicks, taught it. When we arrived at the classroom the first day, a sign on the blackboard advised us to meet by the spring at the edge of Mirror Lake on the campus. There we met Dr. Hicks; he got right down to business.

"What is that tree?" . . . he pointed to one nearby and then glanced at his roll book. The class was listed alphabetically, so my name was on top, and he addressed me. I was pleased. He was pointing at a tree that I knew well, so I said,

"A sweet gum, sir."

He stared at me so long and hard that my face became the color of that sweet gum's leaves in autumn. Finally words came:

"Mr. Ahrens," he barked, "that is a *Liquidambar styraciflua* of the family Hamamelidaceae, and (he now included the entire class) from now on I want NO sweet gum."

I believe we studied every native spermatophyte in Ohio that summer, but we didn't dare to mention a plant's common name in Dr. Hick's presence.

But it was too much for me. I would quit summer school. . . . I was going home to mother I could never master such words: *Liquidambar st*—whatever it was. I couldn't learn such terms; . . . no one, who was normal, could. No, I was going to quit. And so I told my landlady.

"You've paid me two weeks' rent," she said. "If you leave, you forfeit your rent money."

I was too Scotch to lose my money, so I decided to stay two weeks, and, of course, in two weeks I was spouting off *Liquidambar styraciflua* as melodiously as the professor. It really was a wonderful course and I've been partial to plants ever since.

* * * * *

I occupied a number of summers getting a master's degree in insects. I had an arrangement with my major professor that I would spend five weeks in the field collecting and the other five weeks at the university. On one of the trips afield, I ranged as far away as the Everglades in Florida.

While collecting near the very southernmost tip of that state, in Royal Palm Park, I took two big reddish dragonflies that were unknown to science. They were impressive insects with clear strongly veined wings and a long tapering abdomen which terminated in the male with powerful hooks.

They were so different in appearance from anything in dragonfly literature that I knew the thrill of finding some-

thing new and unnamed. I would be able to describe and name a new species—a chance for immortality!

I took all the specimens I had collected back to the university and hurried to show the new ones to the professor under whom I was getting my degree. And he did a rather cruel thing.

"I haven't described or named a U. S. dragonfly for a long time," he said. "You are young and will have ample opportunities to describe others. Supposing you let me have these."

I wanted to tell him that I'd like to describe the new species—that I'd gone all the way to Florida to get them—that he was selfish in asking for them, but half-heartedly I handed them over to him.

But he didn't describe the new species after all. He put it off and put it off. A year later a group of entomologists from Michigan were collecting in Florida, found the same insect, and named it before my professor got around to do it!

* * * * *

One misty yet windy day in July, I was collecting dragonflies in the vicinity of Valdez in Alaska when I came upon a pleasant pastoral scene. I crossed a stream up which salmon were moving toward their spawning grounds high in the mountains in the background. Some distance above me, a big female brown bear was crouching, fishing in the water. Now and then she would strike a salmon, sending the fish into the air and on to the bank where her two noisy, hungry cubs were enjoying a bountiful fish course. I enjoyed watching the bears, then went on my way.

That evening around the oil-drum stove in the little hotel, the old-timers were at it as usual, telling their stories of the good old days when Valdez was a thriving community. There was a lull in the conversation, so I told about the charming picture of bears at work and play.

I was aware as I told the simple incident that a curious hush fell over the group of oldsters, and when I had finished there was a complete silence. I'm positive that the thin white hair on the head of one old gentleman actually stood on end. Slowly he got up, came over to me, and tapped with one finger on my shoulder while he said evenly,

"Cheechako, the wind was blowing from the bear to you."

"I don't remember which way it was going," I answered. . . . "Ah, how do you know?"

"You're here," he replied as though he was sorry. And then my hair stood on end!

* * * * *

I used to think that mudturtles crawled out of the water on a summer's day and on to a partially submerged log because they wanted to benefit from old sol . . . maybe by storing up some extra vitamin D. But once when I was fishing in Slow Crick for bullheads, a big turtle crawled out on a log close to my anchored boat. And attached by their suckers to the skin around the areas where the turtle's hind legs and tail protruded through the shell, was as fine a collection of blood-sucking leeches as you might imagine.

One by one, under the blazing sun, the leeches, being aquatic, loosened their hold and undulated hack to the water. For a short time the turtle enjoyed the pleasure of being unencumbered with those external parasites. Of course, as soon as I moved, the startled turtle slid back into the water where undoubtedly the blood suckers hooked right on again for more nourishment.

* * * * *

Female snapping turtles used to come out of the swamp each year and climb to the highest ledge they could find on

a dredge cut that ran into Slow Crick. The slow moving snappers would lay their eggs and bury them in a peculiar way. We would watch them dig a hole, using the hind legs, and almost fill the excavation with many leathery, soft-shelled eggs. These were smaller than hen's eggs, and of course lacked the limy shell. They would close up the hole, and in a manner that seemed more artful than instinctive, arrange the site so that nothing would seem to have been disturbed. Usually their camouflage was in vain because skunks or raccoons would find the caches, dig up the eggs, and devour them on the spot. Mother would make up a fine batch of omelets if we found a nest of fresh turtle eggs. If we hadn't seen the turtle lay them, however, she turned a deaf ear on omelets.

* * * * *

Brother Bob and I used to pole our raft through the East Harbor, which was much more of a swamp some years than a harbor. Often we'd see a mossy, submerged "boulder" that turned out to be a snapping turtle or a "mossy-back"

bore a hole through the edge of the shell (hurts no more than cutting your fingernail) and using a wire, we'd tether snapper to the horseshoe stake. And around and around he'd tirelessly go.

Finally, mother would say she was ready for the turtle.

Then Bob would hold him by the tail and pull one way. I would tease him until he grabbed the stick, and I would pull in the other direction. Out would come the long neck. Then Harold, the oldest brother, would bring down the sharp knife and separate said turtle from its head. It sounds barbaric after forty years!

The turtle would have to be removed from its shell, cleaned, and parboiled, as mother said, "to get rid of the wildness." There was always a lid on the pot weighed down with sad irons to keep the turtle from leaping out. Life would seem to continue for a long time in their nerves and muscles after the head was removed, so we believed that turtles, like snakes . . . both being reptiles . . . would "live until the sun went down."

The aquatic snapping turtles do not sun themselves as frequently as some other turtles do. Both their meat and eggs make satisfying meals for those who like them.

L. L. Rue photo



as we called them because of the green algae that was attached to the shell. They are aquatic turtles that don't sun themselves as frequently as various turtles do.

When we would catch one, we would drag it ashore by its tail, watching out for its treacherous "snappers." Usually we would get our prize home by teasing it until it would grab and hold on to the end of a sturdy stick. Then Bob would help me get the pole over my shoulder with the creature dangling behind, clinging by the rim of its mouth (turtles have no teeth). Usually one would cling stubbornly most of the way home, but occasionally we would get one that wasn't too tenacious. He would fall and I would have to tease him again until he became angry enough to support his own weight.

Often when we would get the snapper home, mother would have other meat planned for our meals and couldn't find a place on the menu for turtle soup. Maybe we would have just butchered a hog or a beef. In that case, we would

Father used to claim that a turtle was a composite of all kinds of meat: beef, pork, venison, chuck, etc. Be that as it may, turtle meat had the makings of a satisfying meal.

* * * * *

Speaking of eating eggs other than those of domesticated fowl reminds me of a custom common in my boyhood days. There were islands in the lake that were uninhabited by man but completely possessed by the gulls. So close were the nests . . . if the few sticks and weeds assembled could be dignified by that term . . . that one could hardly walk without breaking eggs or, later in the season, trampling the young.

Hotels in the vicinity would send out egg collectors to the islands daily to gather gull eggs by the boat load. A pair of gulls would normally lay two eggs, but if you remove the eggs daily, they will continue to lay two weeks or longer. Many a cake and omelet was island bred, and the subterfuge was unsuspected by the most discriminating guest.

Sponsored By
THE VIRGINIA RESOURCE-USE EDUCATION COUNCIL



A COURSE FOR TEACHERS ON VIRGINIA'S NATURAL RESOURCES

Credits

Three semester hours
or

5 quarter hours

Subjects To Be Taught

GEOLOGY--The origin and nature of the earth's crust; the forces at work to alter the crust, to form mineral deposits; the origin and nature of mineral deposits, with examples from Virginia mineral resources; surface water and ground water as they work to break down and modify the earth's crust through weathering and erosion, and also water as it pertains to the needs of man.

MARINE LIFE--Description of the marine environment with its typical organisms, action and resultant problems in relation to the field of conservation.

SOIL AND WATER--The parts of soil and their importance; how soil contributes to plant growth; the relation of soil to the parent material from which it was formed; the soil profile and its characteristics; and the program for conserving Virginia's soil and water resources.

Small watershed development; use of soil for storing water; and related water management principles.

FORESTS--Forest conservation as it relates to the management of timbered areas; use of the forest as a source of raw material for the wood-using industries for soil stabilization, for watershed protection, and for recreation.

WILDLIFE--Characteristics of animal populations, including fish, that are of importance to man's use of this resource; relation of animals to soil, water, and forest, and the relations of these four basic natural resources to man and his welfare.

Scholarships

A limited number of scholarships to cover tuition, meals, and lodging will be available to Virginia school teachers from funds provided by several interested organizations. All Virginia school teachers are eligible to apply. In order for an application for a scholarship to be considered, it must be received by May 1, 1969.

To apply for enrollment in this course, check the college of your choice, tear off this coupon and mail to: Virginia Resource-Use Education Council, P. O. Box 1642, Richmond, Virginia 23213.

I am interested in the Natural Resource
Course offered at:

- ☐ Virginia State College
June 12-July 2, 1969
- ☐ Virginia Polytechnic Institute
June 16-July 3, 1969
- ☐ Madison College
June 18-July 9, 1969
- ☐ The College of William and Mary
July 21-August 8, 1969

Date _____

Name _____

Address _____

I should like to apply for one of the scholarships. Please send me the necessary forms.

Signature of Applicant _____

Red-cockaded Woodpecker

Bird

of the

Month:

By DR. J. J. MURRAY
Lexington



THE red-cockaded woodpecker has a zebra-striped back, like that of the much more common red-bellied woodpecker, but its most noticeable mark is a large white area on the side of the head. It is somewhat like the hairy and downy woodpeckers, but the zebra back and white face will suffice to distinguish it.

The call of this woodpecker is a rasping and unpleasant note, like the call of a young starling.

In Virginia this is strictly a bird of the southeastern part of the state. It occurs, though not commonly, as a resident from Richmond south to Brunswick County and east to the coast. Many years ago Dr. William Cabell Rives found this bird surprisingly far west around Cobham in Albemarle County in spring and fall. He sent two specimens to the American Museum of Natural History, one dated December 30, 1887, the other undated. He had not known of any records elsewhere in the state but prophesied that it would probably be found "not uncommon south of the James River." In some twenty-five years his prophecy was fulfilled.

Joseph E. Gould found a pair cutting a nest hole near Norfolk in late March 1911, and fledgling young in a nest in the same tree on April 19, 1912. W. F. Rountrey has a record of an active nest near Norfolk as late as May 30, in 1953.

C. C. Steirly found it nesting in the southern part of Southampton County and in the southeastern part of Sussex County in 1949 and 1950. Young have been found near Richmond, at Swift Creek, by DeGarmo.

Arthur T. Wayne, well known ornithologist of South Carolina in the early years of this century, states that these birds choose a pine of which, though the outside is sound, the center is rotten.

The female lays her shiny white eggs, usually three or four of them, around the end of April. In *Birds of North Carolina*, by Pearson and the Brimley brothers, it is stated that when these woodpeckers have an active nest one can always notice fresh turpentine on the bark of the tree.



Edited by HARRY GILLAM

Fishing License Sales Up Last Year

The Commission of Game and Inland Fisheries has certified to the U. S. Fish and Wildlife Service that Virginia had 375,518 paid hunting license holders and 415,297 paid fishing license holders during the 1967-68 fiscal year. This represented an increase of 8% in the number of fishing license holders but less than a 2% increase in hunting license holders. The number of license holders is derived by means of a formula which takes into account the fact that a person may purchase more than one license. This count, along with the geographic area of the state, determines Virginia's share of federal aid funds which last year totaled \$615,644.

Actual sales of resident hunting licenses totaled 255,930 while resident fishing license sales totaled 248,282, a 13% increase. Trout license sales were up 15%, totaling 94,606, while 135,901 National Forest stamps were sold, an increase of 6%. Resident big game license holders totaled 203,383, about the same as 1966-67. In spite of the moderate increases in sales, revenue remained almost identical with that of the previous year, totaling slightly over 3 million dollars.

The license sales figures reflect a trend that has been evident for several years, and that is the rapid growth of interest in and opportunities for freshwater fishing. Hunting license sales figures have been gaining much more slowly.

The revenue from the sale of licenses finances the bulk of the Game Commission's activities and services, including law enforcement, fish and game management and research, the acquisition and development of public hunting and fishing areas, and the preparation and distribution of informative publications. The Commission's only other source of funds are receipts from boat registration, Federal Aid funds allocated under Pittman-Robertson, Dingell-Johnson, and Land and Water Conservation Act programs, and the receipts from timber sales from Commission-owned lands after counties have been given 25% in lieu of taxes.

Wildlife Planting Materials Available Free



March is the month in which to place your order for free wildlife planting materials distributed by the Commission of Game and Inland Fisheries. Bags of annual game bird mixture, each sufficient to plant $\frac{1}{8}$ acre, are available free to qualified landowners and to clubs and civic groups who can substantiate that they have land suitable for planting.

The annual game bird mix consists of soybeans, cowpeas, Korcan lespedeza, German millet, brown-top millet, buckwheat, milo maize and rape. It has proven to be attractive to quail, turkeys, doves, rabbits and deer. It is best planted in strips along field edges adjacent to cover. Woodland fire trails, abandoned logging roads and power line or pipe line rights of way are excellent locations. Orders for the game bird mixture should be placed with the game warden assigned to the county in which the property is located. Materials will be delivered in time for spring planting. Nearly 50 tons were planted by 13,311 cooperators in the spring of 1968.

Federal assistance for developing wildlife habitat on agricultural lands is available through local Agricultural Stabilization and Conservation offices. Wildlife improvements included under "G" practices in the Agricultural Conservation program provide for cost sharing in establishing wildlife food and cover, fencing to exclude livestock and constructing ponds.

2, 539 Deer Killed By Accident

A total of 2,539 deer died in Virginia during 1968 from causes other than legal hunting. Of these 1,627 were dispatched by automobiles, always the leading killer. Illegal hunting activities accounted for at least 738 and dogs were known to have killed 73. Fences took a toll of 66 deer who became entangled and couldn't escape. Collisions with trains and other miscellaneous mishaps accounted for the remainder.

This represented about a 30% increase over the number of accidental deer deaths reported in 1967. Miscellaneous deaths equalled 20% or more of the legal kill in some areas and nearly 10% on a statewide basis.

Fisherman Island to be Wildlife Refuge

Fisherman Island, located at the north end of the Chesapeake Bay Bridge Tunnel, has been turned over to the U. S. Bureau of Sport Fisheries and Wildlife for management as part of the National Wildlife Refuge System. The Island belongs to the Navy, which formerly maintained an installation there. As a Wildlife Refuge, the area will be maintained as a resting, feeding, nesting area for shore birds but non-conflicting recreational activities will be permitted on the island also.

The island is heavily used for nesting by royal terns, common terns, gull-billed terns, black skimmers, herring gulls, least terns, willets, and oyster catchers. Some wading birds nest on the island and at least one pair of ospreys, a species threatened with extinction, nest atop one of the towers on the island.

Fish and Wildlife research studies are now being carried out by the Virginia Institute of Marine Science and Old Dominion College under special use permit from the Navy. It is expected that these studies will continue under the Bureau's planned management of the island.

The new refuge at Fisherman Island is the fourth national wildlife refuge in Virginia. Others are Chincoteague and Back Bay along the coast, and Presquile farther inland.



YOUTH AFIELD



Edited by ANN PILCHER

A Fine Trophy



Courtesy News Gazette, Lexington

Don F. Weaver, son of Mr. and Mrs. John S. Weaver, Jr., of Lexington, shot his eight point buck, weighing 200 pounds field dressed, with a 303 British Enfield rifle November 23 at his family's mountain lodge on Pannel Branch in Nelson County. Pictured with Don is his grandfather, Don G. Fauber of Stuarts Draft, now retired, who previously was game manager of the George Washington National Forest Big Levels Federal Wildlife Refuge.

Girl Bags Buck

15-year-old Jean Wootton of Blackstone displays trophy head of a 9-point buck she brought down with a .20 gauge double within 20 paces of her deer stand in late November. It was her first shot at a deer and the fourth time she has ever been deer hunting. The Kenston Forest sophomore is a full-fledged member of the Blackstone Hunt Club.

Photo courtesy Blackstone Courier Record



Students: ALERT YOUR TEACHERS

They may attend a 1969 SUMMER SHORT COURSE on VIRGINIA'S NATURAL RESOURCES by writing to Conservation Short Course Director E. W. Mundie, Seitz Hall, V. P. I., Blacksburg, and applying for acceptance at one of these schools: *Virginia State College*, Petersburg: June 12-July 2; *V. P. I.*, Blacksburg: June 16-July 3; *Madison College*, Harrisonburg: June 18-July 9; *The College of William and Mary*, Williamsburg: July 21-Aug 8.

(Full scholarships available; 3 semester or 5 quarter hours credit given. Course taught by experts in the fields of geology, marine life, soil and water, forests, wildlife.)

Loudoun IWL Honors Food Patch Winners

First place winner in the Loudoun County food patch contest was Danny Reeves of Leesburg, who was given a shotgun by the Loudoun Chapter of the Izaak Walton League of America. Other prizes awarded by the chapter went to Lester Bowman, Jr., of Purcellville (.22 rifle), Tommy Fletcher of Ashburn (spinning rod), and brothers Reggie and Donnie Sanbower of Lovettsville (transistor radios).

The contest was for development of food patches to encourage wildlife growth



Courtesy Times-Mirror

Walter Murray of the Loudoun County Izaak Walton League presents Danny Reeves with a shotgun for having won first place in the League's annual food patch contest.

on selected areas. Recommendations on soil preparation, fertilization and other suggestions were provided by the local agricultural agents.

Food patches were judged on: point of location (near cover such as brush or woods and water); percentage of stand (germination) and ground cover; seed

production (size of plot); and writing a short essay on "Why I Planted a Wildlife Patch."

Fox Trophy for A Deer Hunter



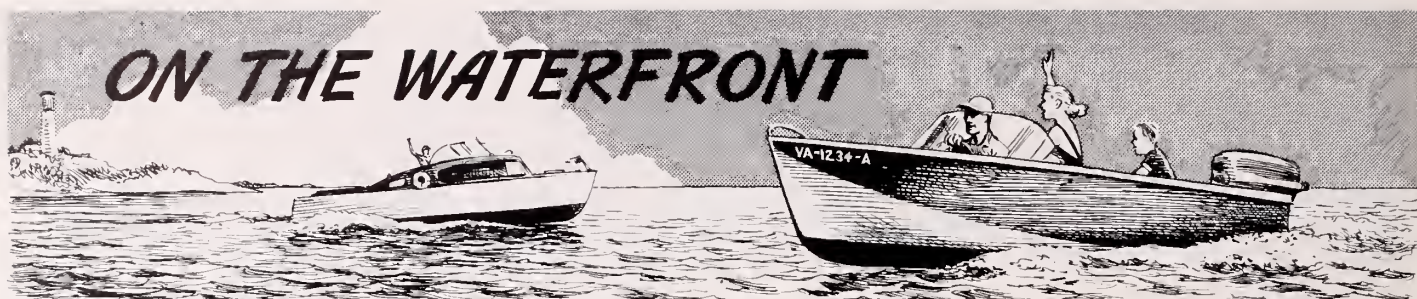
17-year-old deer hunter Billy Draper of Richmond, a long-time *Virginia Wildlife* fan, came home on January 4 with an unexpected trophy. A Remington Model 760 scoped 30-06 bagged this 21 pound red fox in Powhatan County at a distance of 25 yards.

Two For One

Hunting at the Winchester Club in King William County with his father, former Game Commission Chairman Tschanner D. Watkins, 17-year-old Chris Watkins brought down these two geese with one shot on the next-to-last day of waterfowl season.

Commission photo by Kesteloo





Edited by JIM KERRICK

NAEBM Official Makes Proposals on Pending Legislation

Richard D. Snyder, assistant secretary of the National Association of Engine and Boat Manufacturers, told the National Association of State Boating Law Administrators that "the boating industry is caught in the center of a nation-wide political controversy," and asked, "Do we revise our federal system of separate federal and state jurisdictions, or move finally to a completely centralized national system?"

Speaking to the NASBLA National Conference in Atlanta, Snyder pointed out the two national issues confronting the industry and its boating law administrators: (1) federal control or regulation of waste or sewage discharge from recreational boats, and (2) legislative or administrative action designed to improve safety of small boats on our waterways.

Snyder said that the national Association of Engine and Boat Manufacturers believed that the state officials responsible for the administration of boating laws should have "a direct voice in deciding the need for and the formulation of any safety standards or pollution controls under any new federal law, and that this participation should be formalized through legislation."

In addition, Snyder said that NAEEM believed that the mechanism of rule making, or the adoption of standards, "should provide real representation for the industry, boat owners and others who have experience and know-how with respect to recreational boating."

"We are recommending a procedure in which all parties concerned participate in deciding the need for such standards or rules, and also, if the need exists, actually assist in their formulation."

Start Early: Enjoy More Boating

Here's one sure way to enjoy more boating fun this year. Get started early. Don't wait for the traditional Memorial Day weekend.

A sweater or light jacket is all you need on cooler spring days. Rapidly changing weather is typical of spring, so boatmen should pay special attention to weather forecasts.

Getting an early start is the perfect answer for the over-anxious angler. This description fits just about everyone who owns a fishing rod. Fishing action in May is oftentimes the best of the year. As waters warm up, fish become more active, move toward the surface and begin the search for food. What more could an angler want?

For the fisherman who enjoys the solitude of a quiet lake, spring carries a special bonus. While most people are talking about fishing, you'll be hauling in your limit.

Cruising enthusiasts will enjoy the

same privilege. It's like owning a private cruising ground.

What's true on the water goes double for the land. Boating-camping buffs won't have to worry about advance reservations, crowded campgrounds and just too many people to really enjoy the feeling of "roughing it."

The spring season offers camera owners a real treat. Wildlife activity is at its peak. Flowers are blooming and trees taking on summer foliage: ideal subjects for those memorable photographs.

There are practical advantages to early season boating. You'll be first-in-line for any maintenance and tune-up work at your dealer's service shop. Those lines can get pretty long just before Memorial Day.



Aqua Meter Instrument Co.

Compact Depth Sounder-Fish Finder Developed for Multiple Use

Aqua Meter's Depth Sounder-Fish Finder, a new addition to the firm's line of boat instruments, is an exciting development for both small craft and big boat owners.

For a minimum cost it brings to fishermen the advantages and safety of a precision depth sounding device for

navigation purposes, plus the use of the instrument as a fishing aid. Greater angling success can be assured if sandbars, reefs and other underwater prominences that harbor fish can be located. It can also be used to spot schools of game fish or small fish that game fish feed on. Being able to instantly determine water depth also helps to take the guesswork out of finding fish.

The unit pictured is the Aqua Meter deck mount model being installed on the steering console of a 15 ft. fiber glass tri-hulled open boat for use primarily as an electronic fishing aid. Other case styles available include flush mount, modular, surface and panel mount, all with the same electronics.

The compactly designed, sensitive instrument brings to small craft the navigation advantages of the conventional large size depth sounder. It reports immediately depths up to 200 ft., permitting the skipper to note bottom configuration changes as they occur. This not only helps to keep a vessel out of trouble in unfamiliar waters, but serves as a convenient aid for checking chart courses with greater precision. In this regard, the instrument can be especially useful for treasure hunting, such as locating sunken ships.

LEGEND:

*—National Forest Waters
 B—Brook Trout
 R—Rainbow Trout
 BR—Brown Trout

1969 Trout Stocking Plan

(Continued from page 8)

Period Stocked
 Preseason May June

BUCHANAN CO.

Slate Creek B,R B,R
 Hurricane Fork B,R B,R
 Grassy Creek B,R B,R

CARROLL CO.

Stuarts Creek B,R B,R
 Big Reed Island Creek B,R B,R R,BR
 Little Reed Island Creek B,R,BR B,R,BR R,BR
 Crooked Creek B,R R,BR R,BR
 Burkes Creek B,R R R
 Coal Creek B,R B,R

CRAIG CO.

Johns Creek B,R B,R,BR
 Potts Creek B,R B,R,BR R,BR
 Sinking Creek B,R,BR B,R,BR R,BR
 Barbours Creek* R R R
 North Fork Barbours Creek* R R
 South Fork Barbours Creek* R R
 Cove Creek* B
 Lipes Creek* B

DICKENSON CO.

Frying Pan Creek B,R B,R
 Caney Creek B,R B,R

FLOYD CO.

Beaver Creek B,R B,R
 Burkes Fork B,R B,R
 Howells Creek R,B B,R R,BR
 Rush Fork B,R
 West Fork Little River B,R,BR B,R,BR R,BR
 Meadow Creek B,R
 Laurel Fork B,R
 Mira Fork B,R
 Little River R,BR R,BR R,BR

FRANKLIN CO.

Green Creek B,R B,R
 Maggodee Creek B,R B,R
 Runnett Bag Creek B,R B,R

FREDERICK CO.

Back Creek (Upper) B,R B,R
 Back Creek (Lower) B,R B,R
 Hogue Creek B,R B,R
 Cedar Creek B,R,BR B,R R,BR
 Paddy Run (Forest Line to #600) B,R B,R
 Paddy Run* R R R

GILES CO.

Big Stony Creek B,R,BR B,R,BR R,BR
 Dismal Creek* R R R

GRAYSON CO.

Big Wilson Creek B,R B,R R
 Middle Fork Helton Creek B B R
 Big Fox (lower) B,R,BR
 Big Fox (upper) B,R B,R R
 Middle Fox Creek B,R B,R R,BR
 Elk Creek B,R,BR B,R R,BR
 Peach Bottom Creek B,R B,R R,BR
 Helton Creek B,R B,R R,BR
 Turkey Knob Fork Creek B,R B

GREENE CO.

Ivy Branch B,R B,R
 South River B,R B,R R,BR
 Swift Run B,R B,R R,BR

HENRY CO.

Smith River B,R,BR B,R,BR R,BR

HIGHLAND CO.

Bullpasture River B,R,BR B,R,BR R,BR
 Crab Run B,R B,R R
 S. F. Potomac River B,R B,R
 Laurel Fork B,R B,R
 Jackson River B,R,BR B,R,BR R,BR
 Back Creek B,R B,R
 Benson Run* B B
 Laurel Fork* B B

LEE CO.

Hardy's Creek B,R B,R R
 Dry Creek B,R B,R R,BR
 Martins Creek B,R B,R
 North Fork Powell River B,R B,R R

National Open Shooting Dog Champ

(From page 9)

Entrants for the Championship came from a widespread geographic spectrum with representatives from New England, New York, Pennsylvania, New Jersey, all of the southern states and west to Texas, Missouri, Kansas and Oklahoma, and Michigan were among the competitors for the purse and the coveted Championship diadem. Nine professional trainers were on hand with the cream of their current competitive strings to vie for honors in the week-long event. The group made its headquarters at the President Madison Inn at Orange, Virginia, which has long been headquarters for trials on this site. The Chamber of Commerce of Orange were hosts on Sunday evening preceding the running with a sumptuous cocktail party which preceded a dinner, and then the drawings for braces for the impending Championship. Judges for the Championship offered a trio of talented men of long experience and background in the bird dog game. Les Tichenor, Jr., is the senior member of the triumvirate, as he had performed in this role since the second renewal in 1962. R. M. "Bobby" Short of Como, Mississippi, was serving his second consecutive session, having joined the judicial group last year. A newcomer this year was Delmar Smith of Edmond, Oklahoma, who has served widely in similar roles as a judge and brings a wealth of background and knowledge to the assignment. This trio functioned to perfection and were alert not to miss a single detail of the action during the entire five days of running. Though there were at least four outstanding challengers for the honors gained by the winner, there was not a dissenting voice raised when the announcement of the winner was voiced.

The field of starters was divided into thirty-five pointers and four setters. Pointers have won six of the eight runnings of the Championship, and with Easy Mark coming on to take the crown this year, it broke up a succession of wins by setters. Commander's Rocket Joe, a Texas owned setter, had won the crown in 1966, and last year it was won by Morganna Speckles, a setter female owned by Henry Lattimer of Washington, D. C., and handled by Roy Manns of Madison, Virginia. Dean Lord, who handled this year's Champion, had handled the 1966 winner, and in returning to the top spot again this year he became the first professional trainer to repeat the feat of winning top honors. Mr. Cassado, who hails from Wichita, Kansas, had planned to be on hand on Thursday morning when his favorite performed, but a mix-up in air traffic caused a delay with the result that he did not arrive until Friday, but he was on hand for the finish and to participate in the picture-taking ceremonies and receive the congratulations and plaudits of the many enthusiasts who had seen the fine winning performance.

Easy Mark, the new Champion, is no stranger to the winner's circle as he has won on at least twenty other occasions in the past two years. He was raised from a puppy by Mr. Casado, who sold him after weaning to another field trialer from Wichita, but when he showed so much promise at a year old, he bought him back and started to develop him for field trials. In the past year, he has had other noteworthy wins—being runner-up in the Kansas Classic last spring and runner-up in the recent Amateur Championship of Region #7. He also was designated as Dog of the Year in Oklahoma on the field trial scene for the year 1968. Much of his breeding is of championship stock, as both of his grandfathers are champions of renown—Paladin's Royal Heir on his dam's side and Gunsmoke on his sire's side. It is expected that he will be widely favored by breeders following his outstanding win in this year's stellar Championship.

1969 Trout Stocking Plan

(Continued from page 25)

LEGEND:

- *—National Forest Waters
- B—Brook Trout
- R—Rainbow Trout
- BR—Brown Trout

Period Stocked

Period Stocked

MADISON CO.

	Preseason	May	June
Garth Run	B,R	B,R	R,BR
Hughes River	B,R	B,R	R,BR
Rapidan River (fish-for-fun stream)	R		
Robinson River	B,R	B,R	
Rose River	B,R	B,R	

MONTGOMERY CO.

	Preseason	May	June
Brush Creek	B,R	B,R	
Tom's Creek	B,R	B,R	
South Fork Roanoke River	B,R,BR	B,R,BR	R,BR
Poverty Creek*	R	R	
Craig Creek*	R	R	

NELSON CO.

	Preseason	May	June
Tye River	B,R,BR	B,R,BR	R,BR
North Fork Tye River	B,R	B,R	R,BR
Stony Creek	B,R	B,R	R
Rockfish River	B,R	B,R	

PAGE CO.

	Preseason	May	June
East Fork Hawksbill Creek	B,R	B,R	
Hawksbill Creek	B,R	B,R	
Cub Run*	B,R	B,R	B,R
Pitt Spring Run*	B,R	B,R	R
Brown Run*	B		
Upper Passage Creek*	B,R	R	

PATRICK CO.

	Preseason	May	June
Dan River (below Powerhouse)	B,R	B,R,BR	R,BR
Dan River (above Powerhouse)	B,R	B,R	
Rock Castle Creek	B,R	B,R	
Round Meadow Creek	B,R	B,R	
North Fork Mayo Creek	B,R	B,R	
South Fork Mayo Creek	B,R	B,R	
Poorhouse Creek	B,R		
Big Ivy Creek	B,R	B,R	
Ararat River	B,R		

PULASKI CO.

	Preseason	May	June
Big Laurel Creek	B,R	B,R	
West Fork Peak Creek	B,R	B	
Tract Fork*	R		

RAPPAHANNOCK CO.

	Preseason	May	June
Piney Branch	B,R	B,R	
North Fork Thornton River	B,R	B,R	

ROANOKE CO.

	Preseason	May	June
Roanoke River	B,R,BR	B,R,BR	
Tinker Creek	B,R	B,R	
Glade Creek	B,R,BR	B,R	

ROCKBRIDGE CO.

	Preseason	May	June
Mill Creek	B,R	B,R	
Irish Creek	B,R	B,R	R,BR
South River	B,R	B,R,BR	R,BR
Hayse Creek	B,R	B,R	R,BR
Big Mary's Creek*	B,R	B,R	
Bratton's Run*	B		
Elk Creek*	R	R	

ROCKINGHAM CO.

	Preseason	May	June
North Fork Shenandoah River	B,R,BR	B,R,BR	
German River	B,R	B,R	
Dry River	B,R	B,R	
Briery Branch	B,R	B,R	
Silver Lake	R	R	R,BR
Lake Shenandoah	R		
Boones Run*	B,R	R	R
Long Run*	B		
Shoemaker River*	R		
Blacks Run*	B,R	B,R	B
Gum Run*	B	B	
Skidmore Fork*	B,R	B,R	
Union Springs Run*	B	R	
Slate Lick Run*	R	R	
Briery Branch*	B,R	B,R	

RUSSELL CO.

	Preseason	May	June
Big Cedar Creek	B,R,BR	B,R,BR	R,BR
Big Cedar Creek (fish-for-fun)	R		

SCOTT CO.

	Preseason	May	June
Little Stony Creek	B,R	B	
Stock Creek	B,R	B	R
Cove Creek	B,R	B,R	

	Preseason	May	June
Big Stony Creek	B,R	B,R	
Devil's Fork*	R	R	
Stony Creek*	R	R	R
Straight Fork*	R	R	R
Little Stony Creek*	R	R	R
Cove Creek*	R		
Mountain Fork*	R	R	

SHENANDOAH CO.

	Preseason	May	June
Passage Creek	B,R,BR	B,R,BR	R,BR
Big Stony Creek (lower)	B,R,BR	B,R,BR	R,BR
Big Stony Creek (Bayse)	B,R	B,R	
Cedar Creek	B,R,BR	B,R,BR	R,BR
Mill Creek	B,R	B,R	
Little Stony (above Woodstock Reservoir)*	B,R	B,R	R
Little Stony (below Woodstock Reservoir)*	R	R	
Paddy Run*	B,R	B,R	R
Cedar Creek*	B	R	
Mountain Run*	R	R	
Little Passage Creek*	B	R	
Peters Mill Creek*	B,R	B,R	
Tomahawk Pond*	R	R	R

SMYTH CO.

	Preseason	May	June
S. Fork Holston River (gorge)	B,R,BR	R,BR	R,BR
S. Fork Holston River (lower)	B,R,BR	B,R,BR	R,BR
Big Laurel Creek	B,R	B,R	R
Staley's Creek	B,R	B,R	R
Lick Creek	B,R	B,R	R
Middle Fork Holston River	B,R	B,R	R
Cregger Creek*	R	R	
Comers Creek*	R	R	R
Hurricane Creek*	R	R	
Cressy Creek*		R	R
Houndshell Creek*		R	R
Dickey's Branch*	R	R	R
West Fork Nicks Creek*		R	
East Fork Nicks Creek*		R	
Canady Creek*		R	R
Little Laurel Creek*		R	
Raccoon Branch*	R	R	
Roaring Fork*		R	R

TAZEWELL CO.

	Preseason	May	June
Wolf Creek	R,BR	R,BR	R
Cove Creek	B,R	B,R	R
Laurel Creek	B,R	B,R	
Roaring Fork	B,R	B,R	R
Little Tumbling Creek	B,R	B,R	R
Punch & Judy Creek*	R		

WARREN CO.

	Preseason	May	June
Gooney Run	B,R	B,R,BR	

WASHINGTON CO.

	Preseason	May	June
White Top Laurel	B,R,BR	B,R,BR	R,BR
Tennessee Laurel	B,R	B,R	R
Green Cove Creek	B,R	B,R	R
Big Brumley Creek	B,R	B,R	R
Big Tumbling Creek	B,R	B,R	R
Valley Creek	B,R	B,R	R
Straight Branch*	R	R	R

WISE CO.

	Preseason	May	June
S. Fork Powell River	B,R	B,R	
North Fork Pound River	B,R	B,R	R
Burns Creek*	R		
Clear Creek*	R	R	
High Knob Lake*	R	R	R

WYTHE CO.

	Preseason	May	June
Cripple Creek	B,R,BR	B,R,BR	R,BR
Francis Mill Creek*	R		
East Fork Stony Creek*	R	R	
East Fork Dry Run*	R	R	
West Fork Dry Run*	R	R	
Gullion Fork*	R		
West Fork Reed Creek*	R	R	
West Fork Peak Creek*	R	R	

Lakes Stocked By Virginia Commission of Game and Inland Fisheries

Smith Mountain Lake	Rainbow
Carvins Cove	Rainbow
Philpott Reservoir	Rainbow
Lake Flannagan	Rainbow
Gatewood Reservoir	Rainbow
South Holston Reservoir	Rainbow

Provide Habitat

PLACES WHERE
WILDLIFE LIVE

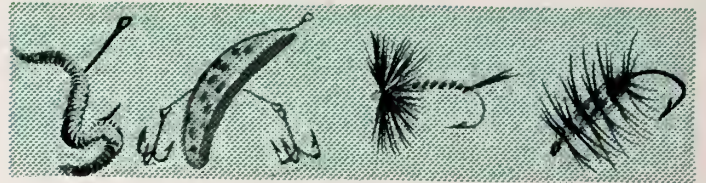
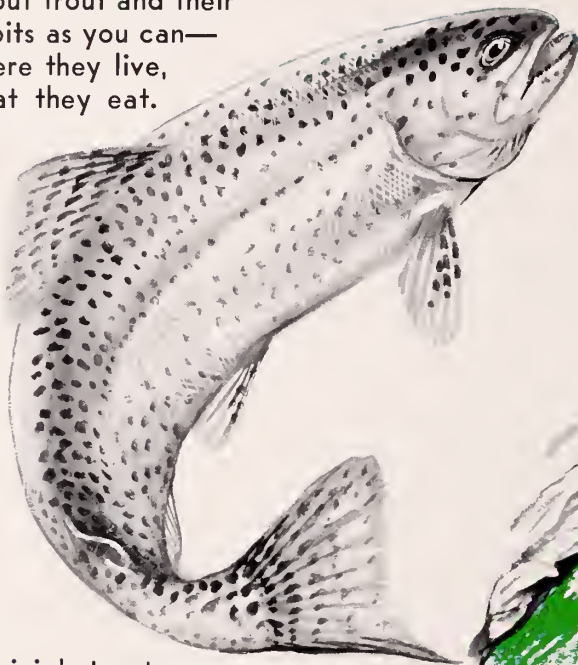


NATIONAL WILDLIFE WEEK 1969

Sponsored by the
NATIONAL WILDLIFE FEDERATION
March 16-22 and State affiliates

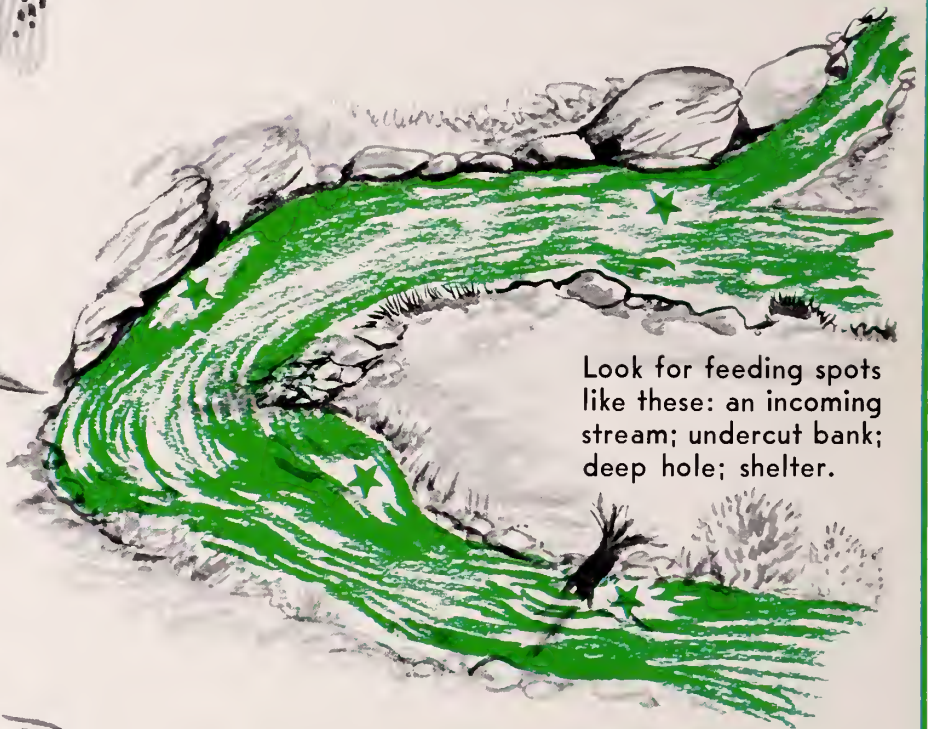
To Catch a Trout

First, know as much about trout and their habits as you can—where they live, what they eat.



Try every legal, sporting method that you know of.

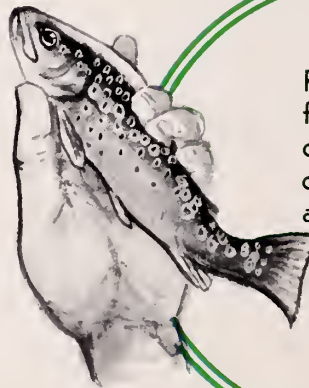
Virginia's trout season:
Noon the first Saturday
in April through December 31
(open all year in certain
impoundments.)



Look for feeding spots
like these: an incoming
stream; undercut bank;
deep hole; shelter.



Use extra caution
in approaching the
stream. Wear inconspicuous clothing.



Play the game
fairly—take
only the number
of trout you
actually need—
fish for fun.

D. RAY